

Amendment to the Claims

Please amend the claims as follows. This listing of claims replaces all prior versions and listings of claims in the application. Claims 1 and 16 have been amended.

Listing of Claims

1. (Currently Amended) An expandable stent comprising: a plurality of serpentine ring structures, wherein at least one each of said ring structures comprising at least one unit structure, wherein said at least one unit structure comprises a plurality of bends at least some of which are key-hole shaped and positioned in a staggered arrangement a first key-hole shaped bend and a second key-hole shaped bend, said first and second key-hole shaped bends being disposed circumferentially adjacent to one another on the same ring structure and being longitudinally staggered with respect to one another, said first and second key-hole shaped bends thereby to avoiding abutment of the said first and second key-hole shaped bends against one another when the said stent is in an unexpanded state, and a plurality of strut members, wherein each of said first and second key-hole shaped bends has a first end connected to one of said strut members and a second end connected to another of said strut members, said strut members extending from said key-hole shaped bends in substantially the same direction; and at least one connector member joining two of said ring structures, said at least one connector member having a first end joined to a peak of one of said bends of one of said two ring structures and a second end joined to a peak of one of said bends of the other of said two ring structures.

2. (Original) The expandable stent of claim 1, wherein said bends which said connector member is joined to are key-hole shaped.

3. (Original) The expandable stent of claim 1, wherein each unit structure of each of said plurality of ring structures is in communication with at least one connector member.

4. (Original) The expandable stent of claim 1, wherein there are two or more connector members joining said two ring structures and said connector members are circumferentially aligned.

5. (Original) The expandable stent of claim 1, wherein adjacent ring structures are axially aligned.

6. (Original) The expandable stent of claim 1, wherein some adjacent unit structures are joined together by first and second substantially straight tie-bars.

7. (Original) The expandable stent of claim 6, wherein said plurality of bends are positioned substantially between said first and second substantially straight tie-bars.

8. (Original) The expandable stent of claim 1, wherein said at least one connector member is one of U, V, and W shaped.

9. (Original) The expandable stent of claim 1, wherein said unit structure comprise three key-hole shaped bends.

10. (Original) The expandable stent of claim 1, wherein two of said strut members form a substantially V-shape.

11. (Original) The expandable stent of claim 1, wherein said at least one connector member joins adjacent substantially aligned bends of adjacent ring structures.

12. (Original) The expandable stent of claim 1, wherein said ring structures are cylindrical.

13. (Original) The expandable stent of claim 1, wherein each of said ring structures comprise an endless pattern of unit structures.

14. (Original) The expandable stent of claim 1, wherein the expandable stent is self-expanding.

15. (Original) The expandable stent of claim 1, wherein the expandable stent is adapted to be expanded using a balloon.

16. (Currently Amended) An expandable stent comprising: a plurality of cylindrical, serpentine ring structures, wherein at least one each of said ring structures comprises an endless pattern of unit structures, wherein each of said unit structures comprise a plurality of strut members and a plurality of bends at least some of which are key-hole shaped and positioned in a staggered arrangement to a first key-hole shaped bend and a second key-hole shaped bend, said first and second key-hole shaped bends being disposed circumferentially adjacent to one another on the same ring structure and being longitudinally staggered with respect to one another, said first and second key-hole shaped bends thereby avoiding abutment of said first and second key-hole shaped bends against one another when the stent is in an unexpanded state, wherein each of said plurality of bends communicates with two of said plurality of strut members, wherein at least two of said unit structures are adjacent and joined together by first and second tie-bars with said plurality of strut members and said plurality of bends of said at least two adjacent unit structures being disposed substantially between said first and second substantially straight tie-bars; and at least one connector member having a curved portion joining two of said ring structures, wherein said at least one connector member has a first end joined to a peak of one of said bends of one of said two ring structures and a second end joined to a peak of one of said bends of the other of said two ring structures.

17. (Original) The expandable stent of claim 16, wherein each unit structure of each of said plurality of ring structures is in communication with at least one connector member.

18. (Original) The expandable stent of claim 16, wherein there are two or more connector members joining said two ring structures and said connector members are circumferentially aligned.

19. (Original) The expandable stent of claim 16, wherein adjacent ring structures are axially aligned.

20. (Original) The expandable stent of claim 16, wherein said unit structure comprise three key-hole shaped bends.

21. (Original) The expandable stent of claim 16, wherein two of said strut members form a substantially V-shape.

22. (Original) The expandable stent of claim 16, wherein said at least one connector member joins adjacent substantially aligned bends of adjacent ring structures.

23. (Original) The expandable stent of claim 16, wherein the expandable stent is self-expanding.

24. (Original) The expandable stent of claim 16, wherein the expandable stent is adapted to be expanded using a balloon.

25. (Original) The expandable stent of claim 16, wherein said at least one connector member is one of U, V, and W shaped.

26. (Original) The expandable stent of claim 16, wherein each of said bends has a first end connected to one of said strut members and a second end connected to another of said strut members.

27. (Original) The expandable stent of claim 16, wherein said bends which said connector member is joined to are key-hole shaped.

28-36. (Cancelled)

37. (Previously Presented) The expandable stent of claim 1, further comprising first and second tie-bars connecting at least one of said two ring structures to another ring structure, said plurality of bends and said struts being positioned substantially between said first and second tie-bars, wherein said plurality of bends comprises first, second and third key-hole shaped bends and said struts comprise first, second, third and fourth struts, said first and second struts are joined together by said first key-hole shaped bend, said third strut is joined to said second strut by said second key-hole shaped bend, and said fourth strut is joined with said third strut by said third key-hole shaped bend, said first strut being joined to said first tie-bar and said fourth strut being joined to said second tie-bar.

38. (Previously Presented) The expandable stent of claim 37, wherein said unit structure consists of one of said connector members, said connector member being joined to said second key-hole shaped bend.

39. (Previously Presented) The expandable stent of claim 38, wherein said first key-hole shaped bend and said third key-hole shaped bend are positioned in said staggered arrangement relative to each other.

40. (Previously Presented) The expandable stent of claim 39, wherein said third strut is longer than said first strut.

41. (Previously Presented) The expandable stent of claim 40, wherein said connector member comprises a curved portion between said first end and said second end.

42. (Previously Presented) The expandable stent of claim 41, wherein said first and second tie-bars are substantially straight, said first key-hole shaped bend being positioned adjacent said first tie-bar and said third key-hole shaped bend being positioned adjacent said second tie-bar when the stent is in an unexpanded state.

43. (Withdrawn) The expandable stent of claim 1, further comprising first and second tie-bars connecting at least one of said two ring structures to another ring structure, said plurality of bends and said struts being positioned substantially between said first and second tie-bars, wherein said plurality of bends comprises first, second, third, fourth and fifth key-hole shaped bends and said struts comprise first, second, third, fourth, fifth and sixth struts, said first and second struts are joined together by said first key-hole shaped bend, said third strut is joined to said second strut by said second key-hole shaped bend, said fourth strut is joined with said third strut by said third key-hole shaped bend, said fifth strut is joined with said fourth strut by said fourth key-hole shaped bend, said sixth strut is joined with said fifth strut by said fifth key-hole shaped bend, said first strut being joined to said first tie-bar and said sixth strut being joined to said second tie-bar.

44. (Withdrawn) The expandable stent of claim 43, wherein said first key-hole shaped bend and said third key-hole shaped bend are positioned in said staggered arrangement relative to each other.

45. (Withdrawn) The expandable stent of claim 44, wherein said third key-hole shaped bend and said fifth key-hole shaped bend are positioned in said staggered arrangement relative to each other.

46. (Withdrawn) The expandable stent of claim 45, wherein said second key-hole shaped bend and said fourth key-hole shaped bend are positioned in said staggered arrangement relative to each other.

47. (Withdrawn) The expandable stent of claim 46, wherein said connector member is joined to said second key-hole shaped bend or said fourth key-hole shaped bend.

48. (Withdrawn) The expandable stent of claim 47, wherein said unit structure comprises two of said connector members, one of said two connector members being joined to said second key-hole shaped bend and another of said two connector members being connected to said fourth key-hole shaped bend.

49. (Withdrawn) The expandable stent of claim 48, wherein said connector members comprise a curved portion between said first end and said second end.

50. (Withdrawn) The expandable stent of claim 49, wherein said first and second tie-bars are substantially straight, said first key-hole shaped bend being positioned adjacent said first tie-bar and said fifth key-hole shaped bend being positioned adjacent said second tie-bar when the stent is in an unexpanded state.